The eight hundred and seventeenth meeting of the Club took place in the Rector's House, Imperial College, London on Tuesday, 7 April 1992. 24 members and 10 guests attended.

Members attending were: R. E. F. Peal (Chairman), Dr C. G. Violani (Speaker), M. A. Adcock, Miss H. Baker, P. J. Belman, Mrs D. Bradley, D. R. Calder, Cdr. M. B. Casement RN, P. J. Conder, S. J. Farnsworth, Miss C. T. Fisher, D. Griffin, Revd T. W. Gladwin, C. A. R. Helm, Ms R-M. Jones, Dr A. G. Knox, Revd G. K. McCulloch, Dr J. F. Monk, D. J. Montier, Mrs A. M. Moore, R. G. Morgan, Mrs M. Muller, J. G. Parker, M. P. Walters.

Guests attending were: Mrs B. Adcock, Mrs J. Calder, Mrs F. Farnsworth, Mrs J. Gladwin, Mrs I. McCulloch, Mrs N. Liddell, Mrs D. Monk, Mrs M. Montier, P. I.

Moore, P. Muller.

Members were pleased to welcome Dr Carlo Violani to speak again to the Club. He spoke on the 18th century naturalist Giovanni Antonio Scopoli and his influence on Italian ornithology. A summary of his talk will be published in a later issue of the Bulletin.

# The birds of La Plata Island, Ecuador

by Fernando I. Ortiz-Crespo & Philip Agnew

Received 11 June 1991

This paper has been written as a result of collaboration between the University of Bristol Isla de Plata Expedition 1990 and Dr F. Ortiz-Crespo. The expedition was formed to follow up recommendations made by Duffy & Hurtado (1984) in a paper for the International Council for Bird Preservation. These included an inventory of the island's flora and fauna. A total of six weeks (20 July–1 September 1990) was spent on the island by six students from the University of Bristol and two students from the Pontificia Universidad Católica, Quito. Dr F. Ortiz-Crespo visited the island on 28 July 1990 with Ben Hasse, Mariuxi Prieto and 10 others.

Isla de la Plata (0°16′S, 81°06′W) is an isolated island 27 km off the Pacific coast of Manabi Province, Ecuador. It has a volcanic rock base, similar to basalt. It measures 5.5 by 2 km, and has an area of 14 km²; the highest point is 167 m. The climate has two distinct seasons: from December to April/May there are high temperatures and heavy rains; the rest of the year is dry and cooler. The vegetation is permanent arid scrub, mainly xerophytic. The island is administered as part of the Machalilla National Park, based at Puerto Lopez. The only structures are a few fishermen's shacks, a derelict hotel building on the north beach and an automatic lighthouse on the upper northwest flats.

History of ornithological exploration

The earliest collecting was by William B. Richardson, on assignment for the American Museum of Natural History. Chapman (1926:711) quotes Richardson, as follows: "Its slopes rise precipitously about 500 feet, forming a plateau five miles long by four at the widest part. This arid plain, cut by two ravines, is covered with thorny brush, wild cotton, cactus and a few stunted trees. In March (25th) it was parched and brown and it had not rained for months. I found 15 species of land-birds, all

breeding. Birds are scarce, except the Mockingbirds, Red-breasted

Starling, Ground Dove and two Flycatchers."

Robert C. Murphy (1936:311) records his visit there on 17 February 1925, in the middle of the rainy season. At that time the island was inhabited by a lighthouse keeper, his family, a few heads of cattle and donkeys, and "hundreds" of goats. During his visit, "La Plata rang with bird songs, the caroling of the 'chirote' or Mockingbird rising above those of all the others". Murphy seems to have confused the Peruvian Meadowlark (chirote) with the Mockingbird (cucube, tilingo). He notes further, "During our wanderings we noted two tyrannids, including the Vermilion Flycatcher, . . . a wren, the Military Blackbird, two species of doves and two of hawks, the Turkey Vulture, Wandering Tattler, Spotted Sandpiper and Cocoi Heron—all exclusive of the oceanic species. Seventeen kinds of land birds have been found at La Plata during March." As for the sea-birds, he lists the Waved Albatross Diomedea irrorata (the skin of a bird shot by the lighthouse keeper in November 1924), Brown Pelican, Blue-footed and Masked Booby, Magnificent Frigatebird and Kelp and Laughing Gulls. The two hawks (species?) and the heron have not been recorded before or since, but it should be noted that the rainy season of 1925 was so copious that the island was covered by a lush carpet of herbs, vines and grasses, so environmental conditions might have favoured the wanderings of strong-flying birds. An idea of the vegetation of La Plata in February 1925 can be obtained from Murphy's photographs (Plate 20 of his Volume I).

Oscar T. Owre (1976) first reported that the Waved Albatross, known before to nest only on Isla Española, Galapagos, also bred at La Plata. Following earlier leads provided by the only resident there (the island's caretaker, Sr. Intriago), he visited the island on 31 December 1974, and observed two displaying albatrosses near Punta Machete. On a later visit (15–17 May 1975), Owre found five birds tending their single eggs. His guide reported that the albatrosses had bred there every year during his 8-year stay on La Plata and had reportedly started doing so "four years prior to his residence". In addition to a large goat population, Owre stated that cats and rats were present, and that the Masked Booby colony was regularly "plundered for eggs and young". His report does not mention

other bird species.

M. Hurtado was on the island in April 1981 and saw nine adult albatrosses. His assistants reported seeing some 30 individuals later in the season. W. L. N. Tickell briefly visited the island on 20–21 May 1988 and only found one adult incubating an egg. Intensive searching of the

surrounding two hectares failed to find any others.

In addition to the albatrosses, the island also hosts the only colony of the Galapagos sea lion *Zalophus californianus wollebaecki* outside the archipelago. Nowak (1987) reports a colony of 12 individuals. Sr. Intriago, who knew La Plata for over 35 years, estimated that there may have been a population of over 50 in previous years. They had been there for as long as he could remember. During our visit only 4 individuals were seen, 3 adults and 1 juvenile. An immature Galapagos sea lion appeared near Bahia de Caraquez, Manabi, in March 1981 (Ortiz-Crespo 1981).

The estimated goat population of 300 (Nowak 1987) has recently been culled by the National Parks authority. There still remains an estimated population of 40–70, including adults and immatures. Other mammals on the island include small breeding populations of feral cats and rats. Bats were also seen around the area of the hotel building. Several reptile species and a scorpion were also collected and deposited at the Católica University Natural History Museum.

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Previous reports of fishermen taking gorgonians or 'black coral' (W. L. N. Tickell) and the plundering of Masked Booby *Sula dactylatra* colonies (Owre 1976) are confirmed by our observations. The slaughter of a turtle on the beach, by fishermen, was prevented by us. When questioned the fishermen said there were many turtles in the area which they caught for

eating.

# Systematic list

The following is an annotated list of the birds found or presumed to be present on the island. Asterisks indicate new records for La Plata.

#### WAVED ALBATROSS Diomedea irrorata

In total 28 albatrosses (22 adults, including 10 pairs, and 6 juveniles) were found. The juveniles ranged from small downy young to much larger ones. Most of the colony was situated just north of Punta Machete in dense vegetation. One pair and chick were found on the upper, flatter part of the island towards Punta Machete, showing that dense colonies are not indispensable for successful breeding.

The colony's history is too fragmentary to ascertain when it first became established or its yearly cycle of events. The absence of albatross records by Richardson in March 1914 might indicate that the birds did not regularly breed then. Murphy visited La Plata at almost the same time of year, in February 1925, but since the rains were heavy and the island was overgrown by vegetation as a result, it is not surprising that he did not see any evidence of albatrosses other than the lighthouse keeper's specimen taken in November 1924. When the Galapagos suffered similar rains in 1982–1983 the large albatross colony there failed to breed (Rechten 1985).

Owre saw displaying birds in December 1974 and incubating individuals the following May, when he learned from an Ecuadorian resident that the island's colony had bred yearly for the previous eight years and started doing so around 1963. This would correspond with the period in the 1960s when for several years virtually no young were reared on Española, Galapagos (Harris 1969). Nowak (op. cit.) was at La Plata in October 1985, and reported that he saw only two pairs then. He also found a dead bird that he presumed had been killed by visiting fishermen. Nowak stated that "the breeding seasons of the [La Plata] albatrosses . . . synchronize with those in the Galapagos", and our sighting of large downy young in July 1990 is consistent with an April–June egg-laying period, as in the Galapagos (Harris 1973). Tickell's count may have been low because most of those found in 1990 were not on the upper flats, where he searched, but on the lower plateau.

It would be worthwhile to map the occupied breeding sites and monitor this isolated population, which is separated by over 1000 km from the main population breeding on Española. A banding programme should be undertaken at La Plata as soon as possible

WHITE-VENTED STORM-PETREL Oceanites gracilis

Nowak (op. cit.) briefly mentions the presence of this species in (or near?) the island in October 1985.

#### RED-BILLED TROPICBIRD Phaethon aethereus

Fifteen nest sites were discovered on the south-facing cliffs. The birds were vocalizing most of the time and seen flying in groups of 2–3. The largest single observation from a cliff edge was of 40 individuals. Murphy (1936) says that La Plata is "probably the southernmost breeding station of the Red-billed Tropic-bird on the west coast of South America".

### **BROWN PELICAN** Pelecanus occidentalis

Groups of up to 46 were seen throughout our stay. Many of those seen were immatures; some had moulted to winter plumage.

#### \*RED-FOOTED BOOBY Sula sula

A small breeding colony was found, occupying two bushes within the Masked Booby colony at Punta Escalera. Of the 20 individuals seen, 13 were adults (all of the brown morph), 5 juveniles and 2 chicks. This substantiates that La Plata has the only colony of this species breeding in the entire eastern Pacific other than the one in the Galapagos.

#### BLUE-FOOTED BOOBY Sula nebouxii

These are widespread over the island, both on the cliff faces and inland. In contrast to those breeding in the Galapagos, they seem much more wary of humans. We estimated a population of 3000, based upon three simultaneous dawn counts on both the coastal and inland areas. We also checked that the counts were not affected by movement of birds between the two areas.

### MASKED BOOBY Sula dactylatra

We found three separate colonies: at Punta Escalera, within the Magnificent Frigatebird colony, and at Punta Machete. A series of three dawn counts was made at each colony and the number of active nests and eggs was recorded, with the following results: Punta Escalera, 254 adults, 162 nest sites (60 with 1 egg, 102 with 2 eggs); frigatebird colony, 71 adults, 3 nest sites (none with eggs); Punta Machete, 399 adults, 18 nest sites (7 with 1 egg, 11 with 2 eggs).

### \*OLIVACEOUS CORMORANT Phalacrocorax olivaceus

One was present in mid-August. It was seen several times with Blue-footed Boobies perched on rocks, along the shore. This is a common species along the southern Manabi coast.

#### MAGNIFICENT FRIGATEBIRD Fregata magnificens

There is a large colony along the northern coast between Punta Palo Santo and Punta Escalera. From a series of dusk counts made as the birds came in to roost, the population was estimated at 2598 individuals. We observed a downy chick, dependent juveniles, immatures and adults,

indicating that they were breeding. Previous accounts have mentioned frigatebirds as present but not breeding on the island (Murphy 1936, Hurtado 1981). Chapman (1926) gives the breeding range as extending south to Santa Clara Island in the Gulf of Guayaquil.

# WHITE-NECKED HERON Ardea cocoi

Murphy's sighting is the only record.

#### TURKEY VULTURE Cathartes aura

The Black Vulture *Coragyps atratus* is abundant along the local coastal villages, but none were seen on the island. The Turkey Vultures on the island seemed to get their main food supply from fishermen gutting their catches on the beach. They were also seen feeding on Masked Booby eggs and fish regurgitated by the boobies. A maximum of 53 were recorded at one time.

The race reported from La Plata by Chapman (1926), based on one female specimen, is *C. aura jota* of the "Southern Temperate Zone" which ranges south to Chile. Some individuals at La Plata could be wintering austral migrants, but two eggs in an old nest we found may indicate that not all the birds are migrants.

# \*PLUMBEOUS KITE Ictinia plumbea

One individual was recorded. It died on the island, presumably from cold and exhaustion. The specimen is now in the collection of the Machalilla National Park. Jorge Macias reports having seen one six months earlier on the island.

## SPOTTED SANDPIPER Actitis macularia

In mid-August one was recorded on the northern beach; it was also seen on other areas of the littoral fringe.

#### WANDERING TATTLER Heteroscelus incanus

One was observed along the northern beach in mid-August. Chapman (1926) reports a specimen taken at La Plata on 11 February.

#### KELP GULL Larus dominicanus

### LAUGHING GULL Larus atricilla

Recorded only by Murphy (1936)

#### EARED DOVE Zenaida auriculata

Chapman (1926) recorded one unsexed Eared Dove collected at La Plata. This very wide-ranging dove may still occur, as Jorge Macias reported that a dove with white-tipped feathers occurred on the island in addition to smaller wholly dark-tailed ground doves (*Columbina cruziana*).

### CROAKING GROUND DOVE Columbina cruziana

These were commonly seen, especially in the interior. Chapman (1926) recorded 1 male and 2 females taken by Richardson on the island.

### \*GROOVE-BILLED ANI Crotophaga sulcirostris

One was observed alive on the island and one partial corpse was also discovered, presumably devoured by feral cats or rats. They are common on the adjacent mainland.

### SHORT-TAILED WOODSTAR Myrmia micrura

Commonly seen and heard. Aerial displays of territorial birds were seen in mid-August. Chapman (1926) lists 1 male and 2 female specimens from the island.

# SHORT-TAILED FIELD TYRANT Muscigralla brevicauda

Chapman (1926) recorded 1 female specimen taken by Richardson. Isla de La Plata is at the northern limit of the range, which extends south along the coast to northern Chile.

### VERMILION FLYCATCHER Pyrocephalus rubinus

Immatures and adults were frequently seen around the island. No melanistic individuals were seen, despite there being a polymorphic population along the Ecuadorian/Peruvian arid coast. Chapman (1926) lists 3 males and 2 females taken at La Plata.

# HOUSE WREN Troglodytes aedon

Those seen were mainly in the undergrowth behind the hotel building. Chapman (1926) recorded 1 male, 4 females and 1 unsexed specimen collected by Richardson on the island.

# LONG-TAILED MOCKINGBIRD Mimus longicaudatus platensis

This slightly differentiated insular race is the island's only endemic form (Chapman 1924). It is common all over the island.

# PERUVIAN MEADOWLARK Sturnella bellicosa

Seen mainly on flat land towards Escalera and at higher elevations. Chapman (1926) recorded 4 males and 1 female specimen collected from the island. According to Richardson, it was one of the most common land birds he encountered.

### COLLARED WARBLING-FINCH Poospiza hispaniolensis

Common all over the island, especially near human activity. Chapman (1926) lists 11 males and 5 females taken on the island by Richardson.

# \*YELLOW GROSBEAK Pheucticus chrysopeplus

One individual was seen over a period of three days (24–27 August), mainly in the area of the lighthouse.

### \*HOUSE SPARROW Passer domesticus

Seen only twice, among Collared Warbling-finches. House Sparrows are common on the adjacent mainland.

### A comparison of the La Plata and Galapagos avifaunas

Española in the Galapagos and La Plata share the Waved Albatross, but it is striking that no island in the Galapagos possesses colonies of all three booby species within sight of each other as La Plata does. The Magnificent Frigatebird colony at La Plata seems larger than any in the Galapagos with the possible exception of the colony on Isla Genovesa (where, incidentally, the only Great Frigatebird *Fregata minor* colony known in the eastern Pacific is found). On the other hand, no shearwaters and only one species of storm-petrel have been found on La Plata, while there are at least three resident species of procellariids and two of storm-petrels reported from the Galapagos (Harris 1974). La Plata has

no resident egrets, but Lava Herons Butorides sundevalli and Yellowcrowned Night Herons Nyctanassa violacea occur on most Galapagos islands, perhaps reflecting their complex shoreline structure, with

mangrove patches and tidal pools.

Regarding land birds, the most striking similarities are the presence of (a) single mockingbird species on single Galapagos islands and La Plata, and (b) two syntopic tyrannid species (the Vermilion Flycatcher and the endemic Myiarchus magnirostris) on the former and two also on La Plata (where the latter species is replaced by Muscigralla brevicauda). The most pronounced difference is that, with the exception of the smallest and remotest islands in the Galapagos such as Darwin and Wolf, all of the Galapagos have more than a single species of finch per island, but only the Collared Warbling-finch occurs at La Plata. It is also worth noting that only one dove species is found throughout the Galapagos, the endemic Zenaida galapagoensis, whereas two species have been recorded from La Plata. However, one of these, the Eared Dove, has recently been seen in the Galapagos, at Puerto Ayora on Santa Cruz Island (J. Black, pers. comm.). In the Galapagos, other important differences are the absence of vultures (perhaps replaced by the endemic Galapagos Hawk Buteo galapagoensis, which sometimes feeds on carrion), hummingbirds, wrens and icterids. In contrast, all the Galapagos islands have the Yellow Warbler Dendroica petechia and the larger islands also the Dark-billed Cuckoo Coccyzus melacoryphus. The absence of these two from La Plata is not surprising, in view of the lack of mangroves and other arborescent shore vegetation. No resident rails, owls, nor gulls occur on La Plata, while one or two rails, one or two owls and two gulls breed on all the main islands of the Galapagos.

Until systematic bird observations at La Plata have been made over several years little more can be said. Knowledge about the Galapagos is derived from the efforts of hundreds of professional and amateur observers who have created what is essentially a complete bird list. Wet season records are badly needed at La Plata, when one can expect the number of bird species to increase and nesting records to be more representative. It is not impossible that some extinctions have occurred at La Plata, subject as it has been to the combined depredations of people. domestic animals and rats from 1925 to 1975 at least. During our walks we observed dozens of orifices resembling petrel burrows on the flatter areas of the island. It would be interesting to dig out some of them, to ascertain the presence of old bones or feather and eggshell remains, as petrels could have fallen victim to rats and cats as they still do in the Galapagos and other islands. It is also likely that human occupation caused not only overgrazing by cattle, donkeys and goats, but also clearing of woody vegetation for fuel. The small goat population has now been reduced to just a few individuals. Fortunately, La Plata is becoming popular for nature tourists because of its spectacular bird life, because not only sealions but breaching Humpback Whales are easily seen around the island for part of the year, and because the neighbouring coast is now accessible by a permananent road. This should help draw attention to conservation needs within the protected Machalilla National Park, and undoubtedly contribute towards gathering more scientific information.

#### Acknowledgements

The expedition members were P. Agnew, J. Ashworth, M. A. Carrera, P. Harvey, A. Langsdale, G. Romero, A. Stanford and E. Winsor-Cundell. We thank Dr W. L. N. Tickell, Dr T. de Vries, Dr B. Olgaard, R. Williams and J. Tobias for their advice and help. The study was supported by DOW Chemicals, Sea-Fresh Watermaker Systems, the Royal Geographical Society, the British Ecological Society and the University of Bristol. F. Ortiz-Crespo's trip was facilitated by the Ecuadorian Protected Natural Area Department of the National Forest Directorate (DINAF). We are especially thankful to Jorge Macias, Machalilla National Park official, for making the boat arrangements and guiding our group. Mariuxi Prieto, Director of the Ecuadorian Foundation for the Study of Marine Mammals, invited F. Ortiz-Crespo to participate in the visit on 28 July 1990.

#### References:

Chapman, F. M. 1924. Descriptions of new birds from Colombia, Ecuador, Peru and Bolivia. *Am. Mus. Novit.* no. 143.

Chapman, F. M. 1926. The distribution of bird-life in Ecuador. *Bull. Am. Mus. Nat. Hist.* 55.

Duffy, D. C. & Hurtado, M. 1984. The Conservation and Status of Sea-birds of the Ecuador Mainland. ICBP Technical Publication II.

Harris, M. P. 1969. Age at breeding and other observations on the Waved Albatross *Diomedea irrorata. Ibis* 111: 97–98.

Harris, M. P. 1973. The biology of the Waved Albatross *Diomedea irrorata* of Hood Island, Galapagos. *Ibis* 115: 483–510.

Harris, M. P. 1974. A Field Guide to the Birds of the Galapagos. Collins, London.

Hurtado, M. 1981. Informe preliminar sobre La Isla de la Plata. Instituto Nacional de Pesca, Guavaquil.

Murphy, R. C. 1936. Oceanic Birds of South America. Am. Mus. Nat. Hist., New York.

Nowak, J. B. 1987. Isla de la Plata and the Galapagos. *Noticias de Galapagos* 44: 17. Ortiz-Crespo, F. I. 1981. Animal Ilegado a Bahia no es foca. *El Universo*, Guayaquil, sec. 2, p.1.

Owre, O. T. 1976. A second breeding colony of Waved Albatrosses *Diomedea irrorata*. *Ibis* 118: 419–420.

Rechten, C. 1985. The Waved Albatross in 1983—El Niño leads to complete breeding failure. Pp. 227–237 in G. Robinson & E. del Pino (eds), El Niño in the Galapagos Islands: The 1982–1983 Event. Charles Darwin Foundation for the Galapagos Islands, Quito.

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ADDENDUM. When this paper was in press, Dr Ortiz-Crespo was informed of three new records for Isla La Plata obtained by Dr Tjitte de Vries, who visited the island on 8–11 January 1992: Striated Heron Butorides striatus (common resident on the adjacent mainland coast), Osprey Pandion haliaetus (common boreal migrant to the mainland), and Peregrine Falcon Falco peregrinus (regular boreal migrant to the mainland).